

Water Conservation

Bureau of Reclamation introduces LIS strategies to water users

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Utah residents are no doubt tired of hearing the numbers of how dry their climate is. They can probably recite in their sleep that their state is the second driest in the nation. And there's a good chance that they're more than vaguely aware that they pay the second cheapest water rates in the mountain west.

But honestly, as normal homeowners, will that stop them from wanting a green lawn? Probably not. And wanting a nice looking yard to compliment a nice looking home isn't necessarily a bad thing.

What should be of some concern is that people like Utah so much that nearly two and a half million of them will be living along the Wasatch Front by 2020.

In addition, much of the state's surface water that can be captured in reservoirs, has been and, environmental concerns may, hinder new projects from being sited by either the state or federal government.

Finally, exceptionally dry years, like what the state experienced last year have been happening more frequently than normal, causing people to draw more heavily from wells, which in turn, lowers the water table.

State water managers consider Utah's current water situation serious, but not unworkable, especially if water users take some action.

In Utah, a "water user" may be municipal, industrial, residential or agricultural. In general, agricultural users use non-treated water for farms. Municipal, industrial and residential users, on the other hand, use the drinkable, "urban" water on commercial and residential landscapes, parks, golf courses and institutional landscapes.

In the urban setting, some places use non-treated water for landscape purposes, while in other communities without secondary waters systems, land-

scape water comes from the potable water supply.

Which leaves residential users. A third of urban water use is indoors, while most of the remaining two-thirds ends up on grass. But, much of that water ends up running down street gutters and storm drains because the sprinklers many people use are inefficient and wasteful. All of us have seen arcing curtains of water irrigating asphalt.

With water at a premium, officials are put in an awkward position. The government isn't in the business of telling people how to use the water they pay for, but it is obliged to offer suggestions about how to help that water go further. And that's where an innovative water conservation program from the Bureau of Reclamation and the Utah State University Extension (USU) comes in.

"Landscape Irrigation Simplified," or LIS is a technique for teaching a more efficient method of applying water to turf. It's built around the principle that only a fixed amount of water is needed to insure greenery stays green.

"Typical homeowners and landscape managers are applying about twice as much water as the landscapes need," according to Fred Liljegren, Reclamation Landscape Specialist. He says inefficient sprinkler systems, improperly set sprinkler controller, and improper irrigation scheduling contribute to the problem.

LIS provides tools to help homeowners and landscape managers address the major problems causing inefficiencies. They include a simplified irrigation schedule based on local evapo-transpiration rates, enhanced water measuring catch-cups, easy to understand performance evaluation procedures for determining irrigation system efficiency, step by step methods for determination of soil types, infiltration rates, and much more.

The attempt to simplify the

irrigation process is one of the program's strongest selling points, especially with Reclamation Acting Regional Director Rick Gold.

"It's quite good," says Gold. "People glaze over if they don't have a technical basis for understanding the concepts."

Gold was among nearly 90 Salt Lake agency employees who attended a one hour seminar on LIS.

"The more we know, the better we can teach it," he said, "and the more we use it, the better water users we become."

Reclamation, in cooperation with USU Extension developed the LIS system as an aid to help homeowners and landscape managers improve the efficiency of their irrigation practices.

As County Extension Agents receive training from Reclamation officials and become proficient in the LIS method, they will train others, including Master Gardener volunteers, in the technique.

Eventually, cooperative efforts between USU Extension, Reclamation, communities and water districts will insure that the public has access to education in the LIS technique.

Tools provided by LIS can also help irrigation system designers and installers verify that a new system is performing as intended. But the tools also include information that can be provided to clients to insure new systems will operate efficiently.

"I am looking forward to having our county agents trained in the LIS method, especially considering the current climate conditions," says Extension Water Conservation Specialist Kelly Kopp. She says that the simplicity of the technique is going to make it possible for them to begin educating the public this year.

"I also feel that cooperative efforts like this one will go a long way toward helping us reach the common goal of efficient water

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